



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,549	02/27/2004	Chang-Ho Do	51876P595	7064

8791 7590 06/17/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER

CUNNINGHAM, TERRY D

ART UNIT PAPER NUMBER

2816

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/788,549

Applicant(s)

DO, CHANG-HO

Examiner

Terry D. Cunningham

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2816

## **DETAILED ACTION**

### ***Summary of changes in this action***

1. The indefiniteness rejection of the previous action have been overcome, however, new such rejection are included herein as necessitated by amendment.

### ***Claim Rejections - 35 USC § 112***

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, there is no support found for the newly recited language in lines 10-14. Firstly, there is no support for the operation of “generating a power-up signal by performing a pull-down operation controlled by the detection signal and a delayed detection signal” (emphasis added). The only signals found responsive to these two signals are “detbd” and “pwrup”. It is understood from the language in lines 12-14, that the operation referred is during the period when that “logic level” is prevented from transitioning. During this period, neither signals “detbd” or “pwrup” fully reach a “pull-down” level. Further, there is no support found for the new language reciting “to thereby prevent a logic level of the power-up signal from transitioning during a power drop of the power supply voltage”. As seen from the specification, the transition is not always prevented, as new recited. This transition is only prevented when the “power drop” is less than a predetermined period. Thus, it is suggested that --having a duration equal to or less than a predetermined period--.

Claims 2-11 are rejected for the reasons discussed above with claim 1.

Art Unit: 2816

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsieh (USPN 4,902,910). Hsieh discloses, in Fig. 8, a circuit comprising: “a power supply voltage level follower unit (4-1A)”; “a power supply voltage detection unit (4-2A)”; “a reset prevention unit (80 and 83)” having a “delay unit (80)”; “a buffer unit (202)”; “an inverter (4-2B)”; “power-up signal (POR)”; “a detection signal (4C’); and “a delayed detection signal (4D’), all connected and operating similarly as recited by Applicant. Reference is made to Fig. 9 which shows the corresponding operation. As seen, the “power-up signal” during times t4 through t6+td is a “pull-down signal” that is generated (i.e., pulled-down) by NAND gate 83”. NAND gate 83 is “controlled by the detection signal (4C’) and a delayed detection signal (4D’)” as well as signal 4F’. Thus, the language of lines 10-11 is met by Hsieh. Further, the signal POR is prevented “from transitioning during a power drop of the power supply voltage” when the drop has a duration less than a predetermined value. Thus, the language of lines 10-11 is further met by Hsieh.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2816

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh (USPN 4,902,910) in view of Lovett (USPN 5,889,416). The above-discussed circuit to Hsieh does not teach the express details for the NAND gate 83 of Fig. 8. The reference to Lovett discloses in Fig. 13 an improved NAND gate having the benefit of uniform slew rate. This NAND gate includes “a first pull-down means (1014 and/or 1016)”; “a first pull-up means (1006 and/or 1008)” and “a second pull-up means (1002)”. Therefore, it would have been obvious for one skilled in the art to use the specific NAND gate taught in Fig. 13 of Lovett for the broad NAND gate 83 of Fig. 8 of Hsieh to obtain the expected advantage of uniform slew rate in the NAND gate.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant is incorrect in stating that element 4-1A is an “inverter”. One skilled in the art would readily recognize 4-1A as divider comprised of diodes and a resistor connected transistor. Examiner contends that the transition response shown in Fig. 9 for signal 4A' would reasonably be deemed “linear”. The remaining disputed operation is discussed above in the rejection.

#### ***Allowable Subject Matter***

Claims 4-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2816

Claim 12 is deemed allowable.

With respect to claims 4-10 and 12, none of the cited prior art discloses an arrangement with a “reset prevention unit” having two series pull-up elements and a pull-down element, wherein the pull-down element and one pull-up element is commonly responsive to the “detection signal” and the other “pull-up element” is responsive to the “delayed detection signal”.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 571-272-1742. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC  
June 15, 2005

  
Terry D. Cunningham  
Primary Examiner  
Art Unit 2816